3969

Diag. Cht. No. 6460-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. 3969

LOCALITY

State Washington

General locality Puget Sound

Locality Port Madison & Port Orchard

1947

CHIEF OF PARTY

A. Daniels

LIBRARY & ARCHIVES

DATE .....

B-1870-1 (1)++

3969

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: Washington.

11—5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. 3969

LOCALITY:

Puget Sound.

Port Madison &

Port Orchard.

1917

CHIEF OF PARTY:

J. A. Daniels.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3969

State Washington

General locality Puget Sound

Locality . Port Orchard and Port Madison

Chief of party John A. Daniels

Surveyed by John A. Daniels, B. C. Freeman.

Date of survey December 1, 1916 to March 6, 1917.

Scale 1: 20,000

Soundings in feet

Plane of reference 2 feet below M. L. L. W.

Protracted by B.C.F., W.O.H. Soundings in pencil by B.C.F., W.O.H.

Inked by B.C.F., W.O.H. Verified by

Records accompanying sheet (check those forwarded):

Des. report, ____ Tide books, ____ Marigrams, 1 Boat sheets,

1 Sounding books, 4 Wire-drag books, ____ Photographs.

Data from other sources affecting sheet

Remarks:

DESCRIPTIVE REPORT.

The area within the limits of this sheet includes Port Orchard from the entrance to Liberty (Dogfish) bay as far south as the entrance to Rich's Passage; and the area of Port Madison inshore from the twenty fathom curve from the entrance to Agate Passage as far as President Point and Point Monroe. Connection was made with the work on sheet 2 at each end of Agate Passage and with that on sheet 3 near entrance to Rich's Passage.

In general, the drag was passed so as to verify the three fathom curve. The drag was hooked shoal on the inshore end and deepened offshore as rapidly as was practicable.

The signals on the southern end of the sheet were all located by the Steamer McArthur during the 1915 season. Those on the northern end were located by this party during this season, a few by hydrographic and topographic methods, but the greater number by triangulation.

A depth of forty-five-feet or more was verified whereever this or greater depths exsisted.

Changes in the charted depths were located as follows:

A 17 foot sounding, mudy bottom, shows that the three fathom curve extends farther to the southward at this point. It is located by the following true azimuths and distances:

Tangent to Point Bolin	243°	.....	820 meters.
Old Seabold dock house	118	.....	915 "
New Seabold dock house	51	.....	1170 "

A 20 foot sounding, hard bottom, is about 550 meters north of the point on the west side of entrance to Manzinita Bay. This locates the southeast end of a small sand ridge a few meters wide and about 50 meters long, which runs in a northwesterly direction. It is located by the following true bearings and distances:

Old Seabold dock house	190°	.....	1265 meters.
Manzanita dock house	118	.....	800 "
Flag pole on Venice dock	218	.....	950 "

A 36 foot sounding, hard sand, is located about 600 meters north of the dock at Manzanita. It is located by the following true bearings and distances:

Battle Point	210°	.....	1930 meters.
Flag pole, Venice dock	1870	.....	565 "
House Manzinita dock	98	.....	1250 "

70 71 71
68 69 73 85

A 23 and a 24 foot sounding, hard sand, lie nearly in range between Point Bolin and Battle Point, and approximately one third the distance from Point Bolin. They are located as follows:

East tangent Point Bolin	07°	1190 meters.
House on Manzanita Dock	103	2030 "
Cupola of dock house P.C.T.S.	320	2690 "

An 18 foot sounding, sand bottom, is about 200 meters north of the Venice dock. It shows that the three fathom curve extends farther off shore at this point than is shown on the chart.

A 23 foot sounding, muddy bottom, is almost directly west of Point Bolin and south of the Pacific Coast Torpedo Station. It marks the location of the northernmost buoy on the torpedo range.

A boulder approximately 6 feet by 8 feet and 8 feet high bares about four feet. It is on range between the Torpedo station dock and a tangent to Point Bolin and nearly a third the distance from the dock. It is only 80 meters from the high water mark. This boulder has been struck several times by launches running to Poulsbo. It was reported as lying farther off shore and a special effort was made to locate it because of the publicity that had been given to its exsistence.

A 12 foot sounding, hard bottom, is just outside the three fathom curve at the entrance to Fletcher's Bay. The sand has probably been washed out of the bay and has made the shoal extend farther off shore than shown by the chart.

A number of small boulders lie to the southward off Jefferson Point, and were located by the drag. They are off little importance, however, since the soundings on them agree so well with the chart.

In all cases, unless, otherwise noted in the records, one foot was taken off the length of upright for lift if the length of upright were less than 30 feet. Above 30 feet the uprights were long and no reduction for lift was made.

The sheet was plotted by B. C. Freeman, Aid, and Wilmer O. Hinkley, D.O.

The shore line was transfered from the chart.

TABLE OF STATISTICS, SHEET 3969

Date	Day	Vol. No.	Linear Miles	Angles	Sdg. Vol.	Sdgs.	Angles
Dec. 1	A	1	4.0	254	1	4	8
7	B	1	5.2	294	1	2	4
8	C	1	6.3	294	1	1	2
11	D	1	4.1	220	1	1	10
29	E	1 & 2	5.2	340	1	3	7
30	F	2	4.1	216	1	3	10
Jan.13	G	2	2.5	132	1	0	3
15	H	2	6.8	250	1	12	24
16	J	2	4.8	198	1	3	7
19	K	2	3.8	172	1	5	10
20	L	3	2.8	130	1	2	4
23	M	3	2.1	82	1	1	2
24	N	3	1.4	90	-	-	-
26	O	3	1.3	68	1	3	7
27	P	3	3.0	168	1	3	8
29	Q	3	5.0	260	-	-	-
30	R	-	---	---	1	1	3
Feb. 6	S	3	1.5	63	1	2	4
7	t	3	1.7	62	-	-	-
10	U	3 & 4	4.1	216	1	3	7
17	V	4	3.5	140	1	1	2
24	W	4	4.2	206	1	3	6
28	X	4	1.5	70	1	2	4
Mar. 1	Y	4	2.7	166	1	3	6
2	Z	4	2.3	108	1	1	2
5	A'	4	1.3	70	-	-	-
6	B'	4	4.2	186	-	-	-
Total..	27	4	89.4	4435	1	63	140

HYDROGRAPHY.

Date	Day	Miles	Sdgs.	Angles.
Feb. 6	A	3.4	72	69

Respectfully submitted

B.C. Freeman

Aid, Coast & Geodetic Survey.

Approved

John A. Daniels

Assistant, Coast & Geodetic Survey.
Chief of Party.

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO NO. 5-VEC

HYDROGRAPHY ETC., (HT)
FIELD RECORDS (H)
CHARTS (H)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

January 30, 1918.

LIBRARY
Place with descriptive report
of hydrographic sheet No. 3969
Drawing Section.

Division of Hydro. & Topog.

Division of Charts:

Tidal reductions have been approved* in
6 volumes of wire drag record and soundings for

HYDROGRAPHIC SHEET 3969

Port Orchard and Port Madison, Puget Sound, Wash.
J.A.Daniels in 1916-7.

Plane of reference is
Mean lower low water* reading

7.5 ft.on the tide staff at Morford, Liberty Bay
7.3 " " " " " " Madison St.,Seattle.

*Caution:- The reductions were made in the field to the old plane of 2 feet below mean lower low water; to reduce to the new plane of mean lower low water the soundings and effective depths must be increased by two feet.

L. P. Shidy
Acting Chief, Section of
Tides and Currents.

Verification Report of Sheet 3969.

There exists no doubt of the area within the working limits of this sheet being well swept. No splits were found except of course where buoys were moored. It often happens that an area which was swept at a sufficient depth and no obstacles found was later reswept at a lesser depth. Using short length sections of 400 ft and having (in the case of an 8 section drag) each section set at a different depth varying by 2 ft., adds to the apparent confusion of lines and to the tediousness of verification.

About 300 m. n.e. of Bolin Pt. 33"D" F buoy grounded set at 24 ft. The sounding obtained near this point 23 - 33 ft.

The entire drag 142 day west of △ Bold in Agate Passage went aground set at 24 ft. The least sdg. obtained here was 32 ft.

"N" buoy was noted in the record as "touching" at 14"W" when set at 21 ft. Probably a continuation of the shoal of 18 ft. 700 m. s.e. of △ Out. No sounding was obtained.

Besides the general increase of depths due to change in plane of reference as noted on sheet there were also further tide revisions of 1 ft. due to a difference obtained by the use of reducers at Morford in some cases instead of those at Seattle or vice versa.

Respectfully submitted

Alois Baer

Draftsman

Wire Drag Sheet No 3969

Owing to errors in the former area and depth tracing, it was found neccessary to prepare a new one.

The protracting on the smooth sheet was not checked except when it was neccessary in order to identify positions and in a few doubtful areas, which were entirely replotted.

As the soundings had previously been verified, they were not checked.

The subdivision of drag areas has not been accurately done, but was not corrected, as it would require too much time to re subdivide the entire sheet. Some corrections to the plotting of hook ups and subdivisions were made in pencil on the smooth sheet and used in preparing the area and depth tracing.

The places, to which attention was called in the previous report, were all investigated and settled, except the grounding at pos 19 W & 20 W, which is left in pencil as this is doubtful and can be finally passed on in the review.

As noted, on the smooth sheet the soundings are shown on the plane of mean lower low water, while the drag depths are two feet below. On the area and depth tracing, both drag depths and soundings are on the plane of mean lower low water.

R. L. Johnston